# Wappapello Lake Flood 2011

**U.S. ARMY CORPS OF ENGINEERS** **BUILDING STRONG•**

## Background

Spring 2011 has produced large amounts of rainfall through southeastern Missouri. The St. Francis River basin is no exception. On Sunday, April 24 and Monday, April 25, Wappapello Lake experienced near-record inflows approaching 88,000 cubic feet per second.

As a flood damage reduction project, Wappapello has performed as it was designed. Without Wappapello Dam, the historic amount of rainfall in the basin would have moved downstream unchecked while other, high water events were already occurring.

With an expected crest of more than two feet over the emergency spillway's elevation (394.74 feet NGVD) expected, the St. Louis District team developed a plan to.

*Overflow spillway (left) and regular outflow spillway (right), May 2, 9:30 a.m.*

*Overflow spillway at Wappapello Lake, May 2, 1:45 p.m.*

In less than 24 hours, a rock dike was built to an elevation of 397.3 to keep the maximum discharge moving through the dam's gates and protect Missouri Highway T and other utility and communication infrastructure behind the spillway. Nearly 12,000 tons of rock was trucked in while hundreds of local volunteers and Corps personnel worked side by side to fill and place sandbags to protect the construction effort April 27-28.

Due to continuing rainfall over the Wappapello basin, the dike was overtopped May 2 at around 2 a.m. By 11 a.m., the spillway was fully functioning as designed. Water over the spillway posed no risk to the dam structure, but Highway T across the dam was destroyed, along with the fiber optics and water lines going across the dam.

The Corps of Engineers, community partners and local law enforcement carried out an early warning plan to provide accurate and updated information to people living downstream of Wappapello Lake. The Corps has also held daily conferences with agencies, county officials, community leaders, and stakeholders to provide the latest information about flood conditions, and has provided regular updates through local media, telephone and internet resources.

**Current Status**

The lake elevation has crested at 400 feet NGVD, surpassing the previous record, with outflows expected to reach 30,400 cfs, more than three times the maximum release from the dam. The dam is operating safely as is being monitored 24 hours a day.

With continued flooding in the region, the Corps is staying in close coordination with state, county and local officials. The Wappapello Lake Project office was evacuated but is not being threatened by the discharge flows. Command centers have been established on both sides of the spillway. Dam access and Corps facilities at the lake remain closed in the interest of public safety.

More information is available on the St. Louis District websites and Facebook page.
www.facebook.com/teamsaintlouis
www.mvs.usace.army.mil
http://bit.ly/floodfight
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